P. O. BOX 9291, 93389

1400 EASTON DRIVE, Suite 111

BAKERSFIELD, CALIFORNIA

February 6, 1990

Mr. C. F. Isselhardt Texaco Producing Inc. 133 W. Santa Clara Ventura, CA. 93001

> Subject: Core Analysis Data Well "Tunnel" #386 Cat Canyon Field Santa Barbara, CA File No. 90025

Dear Mr. Isselhardt;

Percussion type sidewall core samples from the subject well were submitted to our laboratory for permeability, porosity and fluid saturation determinations. The results of these measurements are presented in the accompanying report.

The samples were prepared by encasing in aluminum with 100 mesh end screens to hold the sample intact. The sleeves were seated to the sample by applying a pressure of 700 psig. Saturations were determined by Dean Stark Methods. Prior to measurement of porosity and permeability to air, the samples were dried at 235 degrees Fahrenheit. Porosity was determined by Boyle's Law Method using helium as the gaseous medium. A confining pressure psig was used duing volume and pore permeability measurements. Samples insufficient for measurement bу Stark/Boyle's Law method were determined by the Summation of Fluids method. The analysis procedures are noted on the data page.

We are pleased to have performed this service and trust we will be called upon again in the future.

Very Truly Yours,

GOODE CORE ANALYSIS SERVICE

Bryan A. Bell

Distribution: 4 copies Addressee

DIVISION OF OIL AND GAS RECEIVED MAY O 9 1900 SANTA MARIA, CA

GOODE CORE ANALYSIS SERVICE

														N S		Co Fic
12	11	10	9	œ	7	6		ر ت	4	ω	2	بسا		Sample Number		Company: 'Well: "Tuni Field: Cat County,St:
2070.0	2066.0	2044.0	2027.0	2002.0	1988.0	1967.0	1962.0	1956.0	1938.0	1923.0	1906.0	1884.0	1706.0	Depth Feet		
705.7	331.9	363.9	83.9	350.0	106.7	155.1		271.5	165.9	356.0	302.9	94.8		Perm Ka md		Prod. Inc
33.0	32.7	33.1	30.8	27.7	41.5	27.2		26.8	40.9	28.6	29.1	37.3		Por %P.V.		CA
55.8	33.4	43.0	39.3	40.3	1.0	38.7		29.4	1.7	54.2	56.0	0.0		Oil	Residual Percent	
40.5	56.1	48.3	55.7	47.3	98.5	55.2		67.7	93.1	45.2	42.6	98.8		Water	d Sat.	Location: Elevation: Drlg Fluic
1.38	0.59	0.89	0.71	0.85	0.01	0.70		0.43	0.02	1.20	1.31	0.00		0/W Ratio		n: Sec on: uid: Wa
96.3	89.5	91.3	95.0	87.6	99.6	94.0		97.1	94.8	99.4	98.7	98.8		Total Liquid		Location: Sec 2-9N-33W Elevation: Drlg Fluid: Waterbase
*	*	*	*	*	*	*		*	*	*	*	*				
Sd dbrn vfgr slty dstn vdgld flu	Same cly	sd dbrn vf-fgr slty dstn vdgld flu	Sd dbrn vfgr slty fcly incl dstn vdgld flu	sd dbrn vf-fgr slty dstn vdgld flu	Sd brn-gy vfgr vslty vcly msp stn dgld flu	Sd brn vf-cgr slty cly dstn vdgld flu	Sd gy vf-fgr vslty vcalc no stn no flu	Sd brn vf-vcgr vslty cly dstn vdgld flu	Sd tan-gy vfgr vslty vclylsp stn dgld flu	sd dbrn vf-fgr slty dstn vdgld flu	Sd dbrn vf-fgr slty cly incl dstn vdgld flu	Sd gy vf-fgr vslty cly no stn no flu	Sltstn gy frac no stn no lfu	Description		File No.; 90025 Date: 2\5\1990 Core Type: Sidewall

PINIBION OF OIL AND GAS HEGELVED MAY O 9 1990 SANTA MARIA, CA

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GOODE CORE ANALYSIS SERVICE

Well: "Tunnel #386 Company: Texaco Prod. Inc.

Location: Sec 2-9N-33W

Date: 2\5\1990 File No.: 90025

Field: Cat Canyon

Drlg Fluid: Waterbase Elevation:

Core Type: Sidewall

County, St: Santa Barbara, CA

CORE ANALYSIS PROCEDURES AND CONDITIONS

Procedure (*)

Procedure (**)

Procedure (***)

Trill Coolant: Sampling Meth: N/A Percussion

Percussion

N/A

Jacket Material: Aluminum

N/A

Seat Pressure: Seat Conditions: Chilled Depth-100 (400-700)

N/A N/A

Saturation Meth: Dean Stark/Toluene

Retort

Solvent(s) Used: Toluene Extraction Meth: Centrifuge

N/A

Drying Cond: 235 Degrees F/Gravity N/A

Confining Press: 250 Psig Pore Vol Meth: Boyle's Law Helium

Summation of Fluids N/A

Grain Vol Meth: Boyle's Law Helium

Bulk-Fluids

Bulk Vol Meth: Pore Vol+Grain Vol

Mercury Displacement

Confining Press: 250 Perm Meth:

Psig

N/A **Empirical**

Oil Density Use

0.97 gms/cc